AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the Application.

LISTING OF CLAIMS:

1. (currently amended)

A compound of structural formula I:

I

and pharmaceutically acceptable salts thereof wherein $-L^1-R^1$ is selected from:

-R ¹⁴	O R14	
0-3 N	0-3 N R ¹⁴	0-3 N 11-3
N N 1-3	O N R ¹⁴	O N O N O N O N O N O N O N O N O N O N
N-11-3		0 N R ¹⁴
R ¹⁴ 0-3 N R ¹⁴ 0	O N 1-3	O N N N N N N N N N N N N N N N N N N N

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O N R ¹⁴	N R14	<u>√</u> 0. R ¹⁴
O R14 N R14	O R ¹⁴ N R ¹⁴ R ¹⁴	O R ¹⁴ N R ¹⁴
0 0 0 0 0 14 0 R14	0 N N 1-3	0 - 3 N R ¹⁴
0 0 0 0 0 0	R ¹⁴	0, 0 2 ^S R ¹⁴
0,0 S,N 0-3	0 0 N R ¹⁴	O O N 1-3
0 0 0 0 N 0 0 N 0-3	0 0 0 N R ¹⁴	0 0 0 R ¹⁴ N N 0-3 R ¹⁴
O O O N 1-3	O O R14	O O N O N O N O O N O O O O O O O O O O
0 0 N R ¹⁴	O O R ¹⁴ N N N N N N N N N N N N N N N N N N N	O O N N N 1-3

wherein each R^{14} is independently selected from -H, $-(CH_2)_{1-3}CO_2H$, alkyl, alkoxy, alkenyl, aryl, heteroaryl, arylalkyl, and heteroarylalkyl; and

R² is selected from:

	F F	F CI
EN CN	F CN	FOCI
F O C	F O Br	F O F
	FOUN	F O O
		F O O
F F		F O O
500		FO N
	F O O O	F O O O O

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$$R^{11}$$
, R^{12} , and R^{13} independently are g) R^{50} ;

- h) saturated or mono or poly unsaturated C₅-C₁₄-mono or fused polycyclic hydrocarbyl, optionally containing one or two annular heteroatoms per ring and optionally substituted with one or two R⁵⁰ substituents;
- i)—C₁—C₆—alkyl, C₂—C₆—alkenyl, C₂—C₆—alkynyl, or—C(O)H, each of which is optionally substituted with one, two or three substituents independently selected from R⁵⁰—and saturated or mono—or poly—unsaturated C₅—C₁₄—mono—or fused poly—cyclic hydrocarbyl, optionally containing one or two annular heteroatoms per ring and optionally substituted with one, two—or three R⁵⁰ substituents;
- or R¹²-and R¹³ together with the N to which they are covalently bound, a C₅-C₆-heterocycle optionally containing a second annular heteroatom and optionally substituted with one or two R⁵⁰ substituents;

$$R^2$$
 is $-R^{21}$ $-L^2$ $-R^{22}$;

R²¹ is saturated or mono- or poly- unsaturated C₅-C₁₄-mono- or fused poly- cyclic hydrocarbyl, optionally containing one or two annular heteroatoms per ring and optionally substituted with one, two, or three R⁵⁰-substituents;

R²² is saturated or mono or poly unsaturated C₅-C₁₄ mono or fused poly cyclic hydrocarbyl, optionally containing one or two annular heteroatoms per ring and optionally substituted with one, two, or three R⁵⁰ substituents; and

$$R^{50}$$
 is R^{51} - L^{3} - $(CH_{2})_{n}$ -;
 L^{3} is O , NH , $S(O)_{0.2}$, $C(O)$, $C(O)O$, $C(O)NH$, $OC(O)$, $NHC(O)$, $-C_{6}H_{4}$ -, or a direct bond;

R⁵¹ is H, C₁-C₆-alkyl, C₂-C₆-alkenyl, C₂-C₆-alkynyl, halo, CF₃, OCF₃, OH, NH₂, mono C₁-C₆alkyl amino, di-C₁-C₆alkyl amino, SH, CO₂H, CN, NO₂, SO₃H, or a saturated or mono or poly unsaturated C₅-C₁₄-mono or fused poly—cyclic hydrocarbyl, optionally containing one or two annular heteroatoms per ring and optionally substituted with one, two, or three substituents;

— wherein n is 0, 1, 2, or 3; provided that an O or S is not singly bonded to another O or S in a chain of atoms.

2. (cancelled)

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3. (cancelled)

4. (currently amended) The compound according to claim 2, wherein

A compound of structural formula I:

$$\frac{\begin{array}{c|c} O & O = S - R^2 \\ O & O = S - R^2 \\ \hline N & N \\ \hline N & L - R^1 \\ \hline I & \end{array}$$

and pharmaceutically acceptable salts thereof wherein

 L^1 is -C(O)-, -S(O)₂-, or -(CH₂)_n-;

 R^1 is C_1 - C_6 -alkoxy- C_1 - C_6 -alkoxy:

 R^2 is $-R^{21}-L^2-R^{22}$:

R²¹ is saturated or mono- or poly- unsaturated C₅-C₁₄-mono- or fused poly- cyclic hydrocarbyl, optionally containing one or two annular heteroatoms per ring and optionally substituted with one, two, or three R⁵⁰ substituents;

 L^2 is -O-, -C(O)-, -CH₂-, -NH-, -S(O₂)- or a direct bond;

R²² is saturated or mono- or poly- unsaturated C₅-C₁₄-mono- or fused poly- cyclic hydrocarbyl, optionally containing one or two annular heteroatoms per ring and optionally substituted with one, two, or three R⁵⁰ substituents; and

 R^{50} is R^{51} - L^{3} - $(OH_{2})_{n}$ -;

 L^3 is -O-, -NH-, -S(O)₀₋₂-, -C(O)-, -C(O)O-, -C(O)NH-, -OC(O)-, -NHC(O)-,

-C₆H₄-, or a direct bond;

R⁵¹ is -H, C₁-C₆-alkyl, C₂-C₆-alkenyl, C₂-C₆-alkynyl, halo, -CF₃, -OCF₃, -OH, -NH₂, mono-C₁-C₆alkyl amino, di-C₁-C₆alkyl amino, -SH, -CO₂H, -CN, -NO₂, -SO₃H, or a saturated or mono- or poly- unsaturated C₅-C₁₄-mono- or fused poly- cyclic hydrocarbyl, optionally containing one or two annular heteroatoms per ring and optionally substituted with one, two, or three substituents;

wherein n is 0, 1, 2, or 3;

provided that an O or S is not singly bonded to another O or S in a chain of atoms.

5. (currently amended) The compound according to claim 2 4, wherein R¹ is

methoxyethoxy.

6. (cancelled)

7 (currently amended) The compound according to claim $\frac{3}{4}$,

wherein L^2 is -0-.

8. (previously presented) The compound according to claim 7,

wherein, R² is phenoxyphenyl wherein each phenyl is optionally

substituted with one or two R⁵⁰ substituents.

9. (original) The compound according to claim 8, wherein the

saturated or mono- or poly- unsaturated $C_5\text{-}C_{14}\text{-}\text{mono-}$ or fused

poly- cyclic hydrocarbyl containing one or two annular

heteroatoms per ring is selected from the group consisting of

morpholinyl, piperazinyl, homopiperazinyl, pyrrolidinyl,

piperidinyl, homopiperidinyl, furyl, thienyl, pyranyl,

isobenzofuranyl, chromenyl, pyrrolyl, imidazolyl, isoxazolyl,

pyridyl, pyrazinyl, pyrimidinyl, oxadiazolyl, indolyl,

quinolinyl, carbazolyl, acrydinyl, and furazanyl, optionally

substituted with one or two R⁵⁰ substituents.

10. (cancelled).

11. (currently amended) The compound according to claim 1,

comprising having the absolute stereochemistry of structural

formula **II**:

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12. (currently amended) The compound according to claim 1, comprising having the absolute stereochemistry of structural formula III:

$$O = S - R^{2}$$

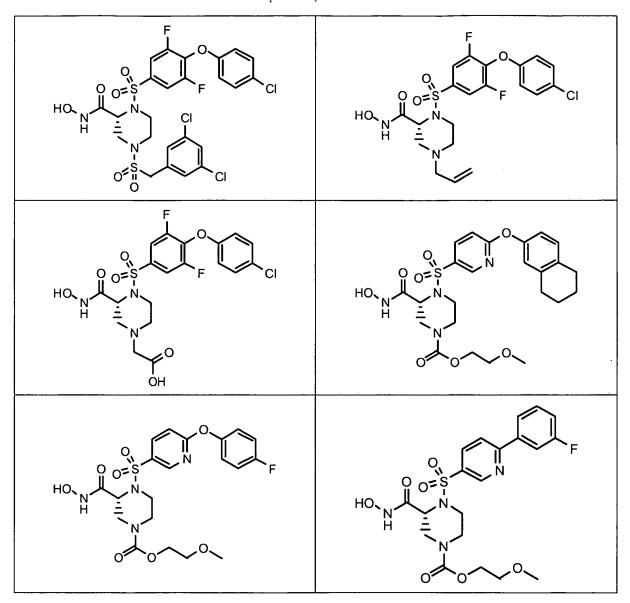
$$O = S - R^{2$$

13. (cancelled)

14. (currently amended) The A compound according to claim 1, selected from:

III

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or a pharmaceutically acceptable salt of any of the above compounds.

15. (currently amended)

A compound according to formula IV,

IV

HO N H
$$L^{1}$$
 L^{1} L^{1}

and pharmaceutically acceptable salts thereof wherein,

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Z is -C(R^{15}) =, -C(H) =, or -N =;

Ar is aryl or heteroaryl, each optionally substituted;

R^{15} is fluoro;

p is \theta, 1, 2, or 3;

L^{1} is -C(O)-, -S(O)_{2}-, or -(CH_{2})_{n}-;

L^{4} is nothing or -O-;

R^{1} is -H, -OR^{11}, -(CH_{2})_{n}R^{11}, -C(O)R^{11}, or -NR^{12}R^{13};

R^{11}, R^{12}, and R^{13} independently are

j) R^{50};
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- k) saturated or mono- or poly- unsaturated C₅-C₁₄-mono- or fused polycyclic hydrocarbyl, optionally containing one or two annular heteroatoms per ring and optionally substituted with one or two R⁵⁰ substituents;
- C₁-C₆-alkyl, C₂-C₆-alkenyl, C₂-C₆-alkynyl, or -C(O)H, each of which is optionally substituted with one, two or three substituents independently selected from R⁵⁰ and saturated or mono- or poly- unsaturated C₅-C₁₄-mono- or fused poly- cyclic hydrocarbyl, optionally containing one or two annular heteroatoms per ring and optionally substituted with one, two or three R⁵⁰ substituents;
- or R¹² and R¹³ together with the N to which they are covalently bound, a C₅-C₆ heterocycle optionally containing a second annular heteroatom and optionally substituted with one or two R⁵⁰ substituents; and

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R^{50} \text{ is } R^{51}\text{-}L^3\text{-}(CH_2)_n\text{-}; L^3 \text{ is -O-, -NH-, -S(O)}_{0\text{-}2\text{-}}, \text{-C(O)-, -C(O)O-, -C(O)NH-, -OC(O)-, -NHC(O)-,} -C_6H_4\text{-}, \text{ or a direct bond;}
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R⁵¹ is -H, C₁-C₆-alkyl, C₂-C₆-alkenyl, C₂-C₆-alkynyl, halo, -CF₃, -OCF₃, -OH, -NH₂, mono-C₁-C₆alkyl amino, di-C₁-C₆alkyl amino, -SH, -CO₂H, -CN, -NO₂, -SO₃H, or a saturated or mono- or poly- unsaturated C₅-C₁₄-mono- or fused poly- cyclic hydrocarbyl, optionally containing one or two annular heteroatoms per ring and optionally substituted with one, two, or three substituents;

wherein n is 0, 1, 2, or 3;

provided that an O or S is not singly bonded to another O or S in a chain of atoms.

16. (original) The compound according to claim 15, wherein -L¹-R¹ is selected from:

-R ¹⁴	O R ¹⁴	0 0 0 R ₁₄
V-0-3 N	0-3 N R ¹⁴	0-3 N 1-3
N N 1-3	N N R 14	O N N N N N N N N N N N N N N N N N N N
0 N-1-3		0 N R ¹⁴
R ¹⁴ 0 R ¹⁴ 0 R ¹⁴	O N 1-3	O N N
N R ¹⁴	0 N R14	√O _{R14}
O R14 N R14	Q R ¹⁴ N N R ¹⁴	O R ¹⁴ N R ¹⁴
0 0-3 N N 14	0 0 0-3 N 1-3	0 0-3 N R14
0 0 0 0 0	O R14	0, 0 2 ^S R ¹⁴

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0 0 N S N 0-3	0 0 N R ¹⁴	O O N 1-3
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 N R ¹⁴	O O R ¹⁴ N N R ¹⁴ R ¹⁴
O O O N N 1-3	O O R14	O N N O N O O N O O O O O O O O O O O O
O O N R ¹⁴	O O R ¹⁴ N N N N R ¹⁴ R ¹⁴	O O N 1-3

wherein each R^{14} is independently selected from -H, $-(CH_2)_{1-3}CO_2H$, alkyl, alkoxy, alkenyl, aryl, heteroaryl, arylalkyl, and heteroarylalkyl.

- 17. (original) The compound according to claim 16, wherein Z is $-C(R^{15}) = \text{ or } -C(H) =$; L⁴ is -O-; and p is at least one.
- 18. (original) The compound according to claim 17, wherein Ar is selected from the group consisting of phenyl, biphenyl, napthyl, tetrahydronaphthalene, chromen-2-one, dibenzofuran, pyryl, furyl, pyridyl, 1,2,4-thiadiazolyl, pyrimidyl, thienyl, isothiazolyl, imidazolyl, tetrazolyl, pyrazinyl, pyrimidyl, quinolyl, isoquinolyl, benzothienyl, isobenzofuryl, pyrazolyl, indolyl, purinyl, carbazolyl, benzimidazolyl, and isoxazolyl, each optionally substituted.
- 19. (original) The compound according to claim 18, wherein Ar is phenyl, optionally substituted, with at least one halogen.

- 20. (original) The compound according to claim 19, wherein p is at least two.
- 21. (original) The compound according to claim 20, wherein $-L^1-R^1$ is $-C(=0)OR^{14}$ or $-(CH_2)_2OR^{14}$.
- 22. (currently amended) The compound according to claim $\frac{21}{2}$, having the structure:

- 23. (original) The compound according to claim 16, wherein Z is -N=; and L^4 is -O-.
- 24. (original) The compound according to claim 23, wherein Ar is selected from the group consisting of phenyl, biphenyl, napthyl, tetrahydronaphthalene, chromen-2-one, dibenzofuran, pyryl, furyl, pyridyl, 1,2,4-thiadiazolyl, pyrimidyl, thienyl, isothiazolyl, imidazolyl, tetrazolyl, pyrazinyl, pyrimidyl, quinolyl, isoquinolyl, benzothienyl, isobenzofuryl, pyrazolyl, indolyl, purinyl, carbazolyl, benzimidazolyl, and isoxazolyl, each optionally substituted.
- 25. (original) The compound according to claim 24, wherein Ar is optionally substituted tetrahydro-naphthalene.

26. (original) The compound according to claim 25, wherein $-L^1-R^1$ is $-C(=0)OR^{14}$ or $-(CH_2)_{2-3}OR^{14}$.

27. (cancelled)

28. (currently amended) The compound according to claim $\frac{21}{2}$ $\frac{14}{2}$, having the structure:

- 29. (original) The compound according to claim 16, wherein Z is -N=; and L^4 is nothing.
- 30. (original) The compound according to claim 29, wherein Ar is selected from the group consisting of phenyl, biphenyl, napthyl, tetrahydronaphthalene, chromen-2-one, dibenzofuran, pyryl, furyl, pyridyl, 1,2,4-thiadiazolyl, pyrimidyl, thienyl, isothiazolyl, imidazolyl, tetrazolyl, pyrazinyl, pyrimidyl, quinolyl, isoquinolyl, benzothienyl, isobenzofuryl, pyrazolyl, indolyl, purinyl, carbazolyl, benzimidazolyl, and isoxazolyl, each optionally substituted.

31. (cancelled)

32. (currently amended) The compound according to claim $\frac{31}{20}$, wherein Ar is optionally substituted phenyl.

33. (original) The compound according to claim 32, wherein $-L^1-R^1$ is $-C(=0)OR^{14}$ or $-(CH_2)_{2-3}OR^{14}$.

34. (currently amended) The compound according to claim $\frac{33}{14}$, having the structure:

35. (original) The compound according to claim 16, of formula \mathbf{V} ,

$$v \qquad \qquad V \qquad$$

36. (original) The compound according to claim 35, wherein Ar is selected from the group consisting of phenyl, biphenyl, napthyl, tetrahydronaphthalene, chromen-2-one, dibenzofuran, pyryl, furyl, pyridyl, 1,2,4-thiadiazolyl, pyrimidyl, thienyl, isothiazolyl, imidazolyl, tetrazolyl, pyrazinyl, pyrimidyl, quinolyl, isoquinolyl, benzothienyl, isobenzofuryl, pyrazolyl, indolyl, purinyl, carbazolyl, benzimidazolyl, and isoxazolyl, each optionally substituted.

37. (original) The compound according to claim 36, wherein Ar is phenyl, optionally substituted, with at least one halogen.

38. (original) The compound according to claim 36, wherein Ar is selected from,

39. (original) The compound according to claim 37, wherein the absolute stereochemistry is according to formula ${\bf VI}$,

$$VI$$

$$O = S$$

40. (original) The compound according to claim 39, wherein $-L^1-R^1$ is $-C(=0)OR^{14}$ or $-(CH_2)_{2-3}OR^{14}$.

41. (cancelled)

- 42. (previously presented) A pharmaceutical composition comprising a compound as described in claim 1 and a pharmaceutically acceptable carrier.
- 43. (withdrawn) A method of treating cancer, parthritis, and diseases related to angiogenesis comprising administering to a mammal in need of such treatment a therapeutically effective amount of a pharmaceutical composition according to claim 42.
- 44. (withdrawn) A method of modulating the activity of Adam-10 comprising administering to a mammal in need of such treatment a

therapeutically effective amount of a pharmaceutical composition according to claim 42.

45. (withdrawn) A method of making a bis-aryl ether sulfonyl halide according to formula **VII**:

wherein X is a halide; and W^1 and W^2 are each independently an optionally substituted aryl, the method comprising: (a) combining a metal-aryloxide salt of a corresponding hydroxide-substituted aryl compound with a fluoro-substituted nitro aryl compound to make a bis-aryl ether nitro-aromatic compound; (b) reducing a nitro group of the bis-aryl ether nitro-aromatic compound to produce a corresponding aniline derivative; and (c) converting the corresponding aniline derivative to the bis-aryl ether sulfonyl halide.

- 46. (withdrawn) The method of claim 45, wherein (a) (c) are performed in the order described.
- 47. (withdrawn) The method of claim 46, wherein the metal-aryloxide salt is combined with the fluoro-substituted nitro aryl in an organic solvent.
- 48. (withdrawn) The method of claim 47, wherein the organic solvent comprises at least one of DMF and acetonitrile.
- 49. (withdrawn) The method of claim 48, wherein the metalaryloxide salt comprises at least one of a cesium salt and a potassium salt.
- 50. (withdrawn) The method of claim 49, wherein the corresponding

aniline derivative is converted to the bis-aryl ether sulfonyl halide via a diazonium intermediate of said corresponding aniline derivative.

- 51. (withdrawn) The method of claim 50, wherein the fluorosubstituted nitro aryl compound is 3,4,5-trifluornitrobenzene.
- 52. (withdrawn) The method of claim 51, wherein the metalaryloxide salt is a cesium salt.
- 53. (withdrawn) The method of claim 52, wherein the corresponding hydroxide-substituted aryl compound is 4-chlorophenol.
- 54. (withdrawn) The method of claim 53, wherein the bis-aryl ether sulfonyl halide is 4-(4-chlorophenoxy)-3,5-difluorophenylsulfonyl chloride.
- 55. (withdrawn) A sulfonyl halide according to formula VIII:

VIII

wherein X is halogen; R^{16} , R^{17} , R^{18} , and R^{19} , are each independently either -H or -F; and Ar is aryl or heteroaryl, each optionally substituted.

- 56. (withdrawn) The sulfonyl halide of claim 55, wherein R^{16} and R^{18} are each -H; and R^{17} and R^{19} are each -F.
- 57. (withdrawn) The sulfonyl halide of claim 56, wherein Ar is selected from the group consisting of phenyl, biphenyl, napthyl, tetrahydronaphthalene, chromen-2-one, dibenzofuran, pyryl, furyl, Application No.: 10/518,110

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pyridyl, 1,2,4-thiadiazolyl, pyrimidyl, thienyl, isothiazolyl, imidazolyl, tetrazolyl, pyrazinyl, pyrimidyl, quinolyl, isoquinolyl, benzothienyl, isobenzofuryl, pyrazolyl, indolyl, purinyl, carbazolyl, benzimidazolyl, isoxazolyl, and each optionally substituted.

- 58. (withdrawn) The sulfonyl halide of claim 57, wherein Ar is phenyl, optionally substituted, with at least one halogen.
- 59. (withdrawn) The sulfonyl halide of claim 58, of formula IX:

60. (withdrawn) The sulfonyl halide of claim 59, wherein X is -Cl.